Effective September 16, 2014, the clinical laboratory will switch methodologies for the Cortisol assay. The switch will be from the Siemens ADVIA Centaur Chemiluminescent Immunoassay to the Abbott ARCHITECT i1000 Chemiluminescent Microparticle Immunoassay (CMIA).

In comparison studies between the two methods, the ARCHITECT Cortisol values were slightly lower than the Centaur Cortisol values. The reference interval for the ARCHITECT Cortisol is also slightly lower. (See below.)

**Sample Requirements**

**Collect:** SST (gold top) or plain red top serum, 4 mL

**Patient Preparation:** None

**Storage/Transport:** Deliver at room temperature to the laboratory for processing. If sample cannot be delivered to the laboratory within 8 hours of collection, centrifuge sample and transport separated serum refrigerated at 2-8°C.

**Stability:** Separated serum - 8 hrs RT, refrigerated 2-8°C for up to 14 days, or frozen at -10°C for longer storage.

**Minimum volume:** 0.5 mL serum; (absolute minimum – only pipetable once – 0.2 mL)

**Unacceptable Conditions:** samples other than serum, samples not held at correct temperature, and grossly hemolyzed samples.

**Reference Interval in ug/dL:**

**Adult:**

| Sample collected before 10 am: | 3.7 – 19.4 ug/dL |
| Sample collected after 5 pm:  | 2.9 – 14.9 ug/dL |

Cortisol levels are normally very low at bedtime and at their highest just after waking around 8 AM. An increased or normal cortisol concentration in the morning along with a level that does not drop in the afternoon and evening suggest an overproduction of cortisol.

**Note:** Patients receiving fludrocortisones, prednisolone, and prednisone (which is converted to prednisolone in vivo) may show artificially elevated cortisol values due to cross-reactivity.

**Routine Testing:** M & Th dayshift, Special Chemistry Dept. at the STC location.

If you have questions or need additional information please contact Laboratory Client Services at 734-7373.